## **REMARKS**

Entry of this Amendment and reconsideration are respectfully requested in view of the amendments made to the claims and for the remarks made herein.

Claims 1-6 are pending and stand rejected. Claim 1 has been amended.

Claims 1-6 stand rejected under 35 USC 103(a) as being unpatentable over Bisdikian (USP no. 6,181,687) in view of Waggener (USP no. 4,829,540). The Office Action states that Bisdikian discloses all the elements recited in claim 1, for example,b But fails to disclose the mapping of sets of return signals from a plurality of secondary stations. Waggener discloses mapping frequencies from relay units that connect remote sites and base stations.

Applicant respectfully disagrees with, and explicitly, traverses the reason for rejecting the claims. However, claim 1 has been amended to more clearly state the invention. More specifically, claim 1 has been amended to recite that the network includes means for mapping a set of return signals onto a first portion of the return band and a means for mapping the set of return signals in the first portion onto the return band. No new matter has been added. Support for the amendment may be found in the written description on at least page 4, lines 16-22, which state in part, "[i]n the subscriber's homes ingress and impulsive noise penetrates the CATV system. Only a part of the return signal frequency band, ... is used by the secondary stations for the transmission of the return signals ... In the means 40, ..., the return signals from the secondary stations are mapped onto the fully signal frequency band."

Bisdikian, as read by applicant, teaches a communication system using tree-search or stack contention-resolution algorithms in hybrid MAC protocols by CaTV stations to resolve message transmission collisions. Bisdikian uses upstream transmission signals that typically occupy frequency bands in the range of 5 MHz to 42 MHz, (see col. 2, lines 9-13). During cable-modem power-on, the H/E 101 assigns to each cable-modem 104 a specific upstream channel, where they [the cable-modems] attempt all their message transmission. (see col. 2, lines 19-22). Thus, Bisdikian teaches allocating specific upstream channel to the cable-modems and fails to teach or suggest grouping into sets the

return signals of a plurality of secondary stations onto a first portion of the return signal frequency band and mapping the first set of signals onto the return signal frequency band, as is recited in the claims.

Waggner, understood by applicant, discloses a frequency-hopping communication system, wherein the transmitter provides data on a first frequency to a relay unit, which provides the data to remote units on a second frequency. The data includes information concerning the frequencies of the next transmission and the time slot allotted for the remote units to respond. The remote units respond back on the first frequency, which is received by the relay unit and re-broadcast to the base station at the second frequency. (see Abstract). Waggner further describes frequency mapping tables that may be used by the base station to determine the next/subsequent frequencies to transmit on. However, Waggner fails to disclose a mapping of a first set of return signals to a first portion of the return band and a mapping of the first set of return signals onto the return band, as is recited in the claims. Rather, Waggner teaches a mapping of signals used in the frequency-hopping communication system and further teaches that the return frequency is essentially the same as the transmission frequency.

A claimed invention is prima facie obvious when three basic criteria are met. First, there must be some suggestion or motivation, either in the reference themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the teachings therein. Second, there must be a reasonable expectation of success. And, third, the prior art reference or combined references must teach or suggest all the claim limitations.

Neither Bisdikian nor Waggner, individually or in combination, teach or suggest all the elements recited in claim 1 and hence, one would not be motivated to develop a system having all the features recited in claim 1. Neither Bisdikian nor Waggner teach or suggest a first mapping of return signals on to a first portion of the return band and a second mapping of the return signals onto the return band.

Even if the teachings of Bisdikian and Waggner were combined, the combination would not include all the elements in independent claim 1, as neither Bisdikian nor Waggner teach or suggest a first mapping of return signals on to a first portion of the return band and a second mapping of the return signals onto the return band.

Having shown that the combination of Bisdikian and Waggner fails to teach or suggest all the elements claimed, applicant submits that the reason for the rejection has been overcome and the rejection can no longer be sustained. Applicant respectfully requests withdrawal of the rejection and allowance of the claim.

The other claims in this application are each dependent from the independent claim discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the consideration of the patentability of each on its own merits is respectfully requested.

Although the last Office Action was made final, this amendment should be entered. No matter has been added to the claims that would require comparison with the prior art or any further review. Accordingly, pursuant to MPEP 714.13, applicant's amendments should only require a cursory review by the examiner. The amendment therefore should be entered without requiring a showing under 37 CFR 1.116(b).

For all the foregoing reasons, it is respectfully submitted that all the present claims are patentable in view of the cited references. A Notice of Allowance is respectfully requested.

Respectfully submitted,

Dan Piotrowski Registration No. 42,079

By: Steve Cha

Attorney for Applicant Registration No. 44,069

Date: July 25, 2005

## Mail all correspondence to:

Dan Piotrowski, Registration No. 42,079 US PHILIPS CORPORATION P.O. Box 3001 Briarcliff Manor, NY 10510-8001

Phone: (914) 333-9624 Fax: (914) 332-0615

## Certificate of Mailing Under 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to MAIL STOP AF, COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA. 22313 on July 25, 2005.

Steve Cha, Reg. No. 44,069 (Name of Registered Rep.)

(Signature and Date)